

# CRS Issue Brief for Congress

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## A Value-Added Tax Contrasted with a National Sales Tax

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## A Value-Added Tax Contrasted with a National Sales Tax

### SUMMARY

Proposals to replace all or part of the income tax and proposals for national health care have sparked congressional interest in the possibility of a broad-based consumption tax as a new source of revenue. Both a value-added tax (VAT) and a national sales tax (NST) have been considered by some Members of Congress.

A firm's value added for a product is the increase in the value of that product caused by the application of the firm's factors of production. A VAT on a product would be levied at all stages of production of that product. A firm's net VAT liability is usually calculated by using the credit method. According to this method, a firm determines its gross tax liability by multiplying its sales by the VAT rate. Then the firm computes its net VAT liability by subtracting VAT paid on purchases from other firms from the firm's gross VAT liability.

The three types of VAT differ in their tax treatment of purchases of capital (plant and equipment). A consumption VAT treats a firm's purchases of plant and equipment the same way as any other purchase by a firm. All developed nations with VAT have the consumption type. The other two types of VATs are the income VAT and the gross product VAT. Under the income VAT, the VAT paid on the purchases of capital inputs is amortized (credited against the firm's VAT liability) over the expected lives of the capital inputs. Under the gross product VAT, no deduction for the VAT on purchases of capital inputs is allowed against the firm's VAT liability. A NST would be a federal consumption tax

collected only at the retail level by vendors. Both a VAT and a NST are assumed to be ultimately paid by consumers. For FY2000, a broad-based VAT or NST could raise net revenue of approximately \$37.8 billion for each 1% levied.

The operating differences between a consumption VAT and a NST have important policy implications. The administrative cost of a VAT would exceed that of a NST because a VAT would require more information to be reported and audited. An opportunity exists for a NST to be collected jointly with state sales taxes, but a federal VAT offers no readily available joint collection possibilities. A consumption VAT with the credit method more easily excludes inputs from double taxation than does a NST. A consumption VAT would be easier to enforce than a NST. It is in the self-interest of a firm to have accurate purchase invoices so that it can obtain full credit for prior VAT paid. Tax authorities can double check the accuracy of the VAT remitted by any firm because data are collected from producers at all levels of production. A VAT could have a broader tax base than a NST because a VAT is easier to enforce. A VAT could have a higher tax rate than a NST because a VAT is more difficult to evade. A VAT would require more time to implement than a NST because a VAT is more complicated, covers more firms, and is a new tax method. A VAT may be less visible to consumers than a NST. A VAT is levied at all stages of production, and policymakers have the option of not requiring the amount of VAT to be shown on retail sales receipts.

## MOST RECENT DEVELOPMENTS

*On April 3, 2000, Representative Bill Archer, Chairman of the House Ways and Means Committee, stated that the Ways and Means Committee would hold hearings on April 11-13, 2000 about tax reform proposals which would replace the current tax code with a simpler and fairer tax system.*

## BACKGROUND AND ANALYSIS

Proposals to replace all or part of the income tax and proposals for national health care have sparked congressional interest in possible sources of additional revenue. A value-added tax (VAT) or a national sales tax (NST) have been frequently discussed as possible new tax services. Both the VAT and the NST are taxes on the consumption of goods and services and are conceptually similar. Yet, these taxes also have significant differences. This issue brief discusses some of the potential policy implications associated with these differences.

### Concept of a Value-Added Tax

The value added of a firm is the difference between a firm's sales and a firm's purchases from all other firms. In other words, a firm's value added is simply the amount of value that a firm contributes to a good or service by applying its factors of production (land, labor, capital, and entrepreneurial ability). A value-added tax would be a tax, levied at each stage of production, on a firm's net value added. The credit method is usually used to collect the VAT. Under the credit method, a firm would calculate the VAT on its sales. Next, a firm would compute its VAT liability by subtracting the VAT paid on its inputs from the VAT on its sales, and would then remit the difference to the federal government to cover its tax liability.

There are three types of VATs which differ in their tax treatment of purchases of capital inputs (plant and equipment). The consumption-type VAT treats capital purchases the same way as the purchase of any other input, i.e., it is equivalent to expensing. The other two types of VATs are the income VAT and the gross product VAT. Under the income VAT, the VAT paid on the purchases of capital inputs is amortized (credit against the firm's VAT liability) over the expected lives of the capital inputs. Under the gross product VAT, no deduction for the VAT on purchases of capital inputs is allowed against the firm's VAT liability. The consumption VAT is the only type of VAT that is used in developed nations and has been proposed for the United States; consequently, the consumption VAT is contrasted with the NST in this issue brief.

### A National Sales Tax

A national sales tax (NST) would be a federal consumption tax collected only at the retail level by vendors. The NST would equal a set percentage of the retail price of taxable

goods and services. Retail vendors would collect the NST and remit tax revenue to the federal government.

The retail price of a good or service equals the sum of value added at all stages of production. Consequently, a value-added tax and a national sales tax with the same tax rate and tax base would yield the same amount of revenue. The operating assumption of policymakers and economists is that both taxes are fully shifted forward onto consumers; that is, the price to the consumer increases by the (full) amount of the tax. For FY2000, a broad-based VAT could raise net revenue of approximately \$37.8 billion for each 1% levied.

## **Policy Implications**

The operating differences between a VAT and a NST have many important policy implications, including the following eight factors: administrative cost, joint tax collections, avoiding double taxation of intermediate goods and services, enforcement, broadness of tax base, maximum tax rate, time required to implement, and visibility.

### **Administrative Costs**

Under a VAT, all firms would have to report tax information and collect taxes. Under a NST, firms without retail sales would not report or collect taxes. But the substantial majority of all firms would collect the NST since they have some retail sales. Under a VAT with a credit method of collection, each firm must keep invoices on all sales and purchases from other firms, and these invoices would be subject to audit by tax authorities. Hence, the value-added tax would require more information to be reported and audited than a national sales tax, and, consequently, a VAT could be expected to be more expensive to administer than a NST.

### **Joint Tax Collection**

Since 45 states and the District of Columbia have general sales taxes, an opportunity exists for a NST to be collected jointly with state sales taxes. A federal VAT could not be jointly collected with state sales taxes. States could convert their sales taxes to a VAT with the federal tax base, but this is unlikely since it would require that the states establish an entirely new tax system. Consequently, no administrative costs saving would be expected from a VAT; therefore, the collection costs of a VAT can be expected to be higher than a NST.

### **Avoiding Double Taxation of Intermediate Goods and Services**

Double taxation occurs if an input is taxed at the time of purchase and then a tax is levied on the same input again when it becomes part of the output of the firm. A consumption VAT, with the credit method of tax computation, easily excludes inputs from taxation. The exclusion of inputs from a NST would be more difficult. Usually, firms buying inputs would have to provide sellers with exemption certificates before making their purchases. At the state level, procedures to exempt input purchases from state retail sales

taxes have worked imperfectly. It is therefore reasonable to expect that excluding inputs from taxation would be more difficult with a NST than with a VAT.

## **Enforcement**

With a VAT, a firm would have a financial interest in ensuring that amounts of VAT paid on input purchases are accurately reported on its purchase invoices since the firm could receive credits against its VAT liability. In addition, the VAT would provide the tax authorities with an opportunity to cross-check the amount of VAT collected because data are gathered from producers at different stages of production. Some enforcement problems do exist with a VAT. For example, firms at different stages of production could collude to falsify invoices. But the NST lacks both the self-enforcing procedure and the cross-checking opportunity of the VAT. Hence, better compliance is expected from a VAT than with a NST.

## **Breadth of Tax Base**

Because of the potential for better enforcement of a VAT, it may be possible to levy a VAT on more goods and services than a NST. This view is supported by the fact that VATs of European nations, on the average, are levied on more goods and services than most state sales taxes in the United States.

## **Maximum Tax Rate**

Both the self-enforcing procedure and the cross-checking opportunity of a VAT would increase the probability of a tax evader being apprehended. Thus, for a given tax rate, a VAT is expected to have better voluntary compliance than a NST. In general, as a tax rate rises, the financial gains from tax evasion increase relative to the punishment if apprehended. Consequently, it is expected that as a consumption tax rate is increased, the level of tax evasion would rise. Since voluntary compliance with a VAT is expected to be better than with a NST, the tax rate for a VAT may be raised to a higher level than for a NST before a problem with tax evasion occurs.

## **Time Required to Implement**

The VAT would take more time to implement than a NST. The VAT is more complicated and would cover more firms than a NST. Also, business executives are not familiar with this form of taxation, so the U.S. government would have to conduct an educational campaign.

## **Visibility**

The value-added tax may be less visible to consumers than a national sales tax. Policymakers and economists assume that 100% of both the VAT and the NST are passed onto consumers. But the perceptions of many consumers may be different about a VAT. Many consumers may believe that a VAT tax would at least partially fall on firms because the VAT is collected at each stage of production. Since the NST is levied only at the retail level, consumers may more readily believe that they would pay the entire tax. Furthermore,

policymakers have the option as to whether or not the amount of a VAT should be stated on retail sales receipts. The amount of a NST would be explicitly stated on sales receipts.

The lower visibility of the VAT relative to the NST may be either desirable or undesirable depending on one's political ideology. It can be argued that taxes should be visible so that the costs of taxation may be compared with the benefits of government spending. Conversely, it can be argued that people generally do not like the idea of paying taxes; consequently, to finance public sector responsibilities, it is better to have taxes seem as painless as possible.

## LEGISLATION

### **H.R. 16 (Dingell)**

National Health Insurance Act. Provides for a program of national health insurance. Imposes a value-added tax (VAT) to finance health benefits. Revenue from the VAT would initially be deposited into the proposed National Health Care Trust Fund. Introduced January 6, 1999; referred to the Committee on Commerce and the Committee on Ways and Means.

### **H.R. 134 (English)**

Simplified USA Tax Act of 1999. Replaces the individual income tax, the corporate income tax, and the estate and gift taxes with a border-adjustable business tax (subtraction-method VAT) and a progressive consumed-income tax. Individuals may utilize the equivalent of universal Roth IRAs to encourage savings. Introduced January 6, 1999; referred to Committee on Ways and Means.

### **H.R. 1040 (Armey)**

Freedom and Fairness Restoration Act of 1999. Repeals the corporate income tax, the individual income tax, and the estate and gift tax; and replaces these taxes with a flat rate consumption tax of 19% for the first two years (declining to 17% in the third year). Introduced March 9, 1999; referred to Committee on Ways and Means and Committee on Rules.

### **H.R. 1467 (Tauzin)**

National Retail Sales Tax Act of 1999. Replaces the individual and corporate income taxes, the estate and gift taxes, and most existing excise taxes with a 15% national retail sales tax. This national retail sales tax would be administered primarily by the states. Introduced April 15, 1999; referred to the Committee on Ways and Means and the Committee on Rules.

### **H.R. 2525 (Linder)**

Fair Tax Act of 1999. Repeals the individual income tax, the corporate income tax, all payroll taxes, the self-employment tax, and the estate and gift taxes and levies a 23% national retail sales tax as a replacement. Every family would receive a rebate of the sales tax on spending up to the federal poverty level (plus an extra amount to prevent any marriage penalty). Introduced July 14, 1999; referred to the Committee on Ways and Means.

**S. Res. 24 (Lugar)**

Resolution expressing the sense of the Senate that the income tax should be eliminated and replaced with a national sales tax. Introduced January 19, 1999; referred to Committee on Finance.

**S. 822 (Specter)**

Flat Tax Act of 1999. Amends the Internal Revenue Code of 1986 to impose a flat rate consumption tax of 20% as a replacement for the personal income tax, the corporate income tax, and the estate and gift taxes. Introduced April 15, 1999; referred to the Committee on Finance.

**S. 1040 (Shelby)**

Freedom and Fairness Restoration Act. Repeals the corporate income tax, the individual income tax, the estate and gift taxes, and replaces these taxes with a flat rate consumption of 17%. Introduced May 13, 1999; referred to the Committee on Finance.

## FOR ADDITIONAL READING

**CRS Issue Briefs**

CRS Issue Brief IB95060. *Flat Tax Proposals and Fundamental Tax Reform*, by James M. Bickley.

CRS Issue Brief IB91078. *Value-added Tax as a New Revenue Source*, by James M. Bickley.

**CRS Reports**

CRS Report 96-195 E. *Agriculture under the Flat Tax*, by Jack Taylor.

CRS Report 95-1063 E. *Consumption and Wage Tax Equivalency: a Brief Exposition*, by Gregg A. Esenwein.

CRS Report 95-1150 E. *Consumption Taxes and State-local Tax Systems*, by Dennis Zimmerman.

CRS Report 95-893 E. *Consumption Taxes and the Trade Balance: the Role of Border Tax Adjustments*, by Gregg A. Esenwein.

CRS Report 96-552 E. *Effects of Flat Taxes and Other Proposals on Housing: an Overview*, by Jane G. Gravelle.

CRS Report 98-248 E. *A Federal Tax on Consumed Income: Background and Analysis*, by Gregg A. Esenwein.

CRS Report 98-529 E. *Flat Tax: an Overview of Selected Policy Issues Relevant to the Hall- Rabushka Proposal*, by James M. Bickley.



CRS Report 95-1141 E. *The Flat Tax and Other Proposals: Who Will Bear the Tax Burden?* by Jane G. Gravelle.

CRS Report 96-315 E. *The Flat Tax and Other Reform Proposals: Overview of the Issues*, by Gregg A. Esenwein, Jane G. Gravelle, and Jack Taylor.

CRS Report 96-413 E. *Flat Taxes: Simplification and Compliance Issues*, by Jack Taylor.

CRS Report 98-82 E. *The Gephardt 10% Tax*, by Jack Taylor.

CRS Report 96-129 E. *The Kemp Commission Report: Fact Sheet*, by Jane G. Gravelle.

CRS Report 98-901 E. *Short-run Macroeconomic Effects of Fundamental Tax Reform*, by Thomas G. Woodward and Jane G. Gravelle.

CRS Report 98-548 E. *Tax Code Termination Act: a Fact Sheet*, by James M. Bickley.

CRS Report 95-500 E. *Value-added Tax: Concepts, Policy Issues, and OECD Experiences*, by James M. Bickley.